



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/748,295

12/31/2003

Myung-Keun Yoo

0630-1901P

8428

2292

7590

09/27/2006

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

TILL, TERRENCE R

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,295

Applicant(s)

YOO, MYUNG-KEUN

Examiner

Terrence R. Till

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/05, 7/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-3 and 6-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 10-12 of copending Application No. 10/748,297. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter of claims 1-4 and 6-8 of the present application is recited verbatim in claims 1-3 and 10-12 of the ‘297 application. The only difference is in claim 2 of the present application that further states “so that the agitator can perform reciprocating rotation in the forward/backward direction in the predetermined angle range”. However this is considered the intended use and, since the claims correspond to the same reciprocating rotation, claims 1 and 2 of the ‘297 application must inherently encompass

Art Unit: 1744

the same functional statement. Thus, claims 1-3 and 10-12 of the '297 application fully encompass the claimed subject matter of claims 1-3 and 6-8 of the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Novinger (US-4,430,768).

5. The patent to Novinger discloses a suction head for a vacuum cleaner, comprising: a casing 1 having a suction port 10-10 for sucking alien substances from the floor; an agitator 6 rotatably installed inside the suction port, brushes 5 being arranged on the agitator in the length direction; and an agitator driving unit 15-19 for driving the agitator to perform reciprocating rotation in a predetermined angle range. Novinger also discloses a driving motor (column5, lines 8-12) for generating a rotational force; and a driving force transmitting unit 15,16,19,19A,19B for transforming rotation of the driving motor into rotation of the agitator, so that the agitator can perform reciprocating rotation in the forward/backward direction in the predetermined angle range. Novinger is considered to additionally disclose the brushes are evenly arranged at regular intervals, in rows, in the length direction of the agitator (see figures 2 and 3) and a suction nozzle installed inside the casing (defined by casing and suction port), for collecting the alien

Art Unit: 1744

substances sucked from the suction port, a volume of which being reduced from the suction port to the opposite side.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novinger (US-4,430,768) in view of Johansson (US-4,020,526).

9. The patent to Novinger discloses a rotary link 15, 19B fixed to a shaft and rotated to the shaft; a hinge bracket 19A fixed to one side of the outer circumference of the agitator; and a connecting rod 19 of which an end is hingedly connected to a position of the rotary link eccentric from the rotation center of the rotary link, and another end is hingedly connected to the hinge bracket. Novinger is also considered to disclose a first hinge hole is formed in the position of the rotary link eccentric from the rotation center of the rotary link; a second hinge hole is formed on the hinge bracket; and a first hinge shaft inserted into the first hinge hole of the rotary link is

Art Unit: 1744

protruded from an end of the connecting rod, and a second hinge shaft inserted into the second hinge hole of the hinge bracket is protruded from another end of the connecting rod, and wherein a first hinge shaft is protruded from the position of the rotary link eccentric from the rotation center of the rotary link; a second hinge shaft is protruded from the hinge bracket; and a first hinge hole into which the first hinge shaft of the rotary link is inserted is formed in one end of the connecting rod, and a second hinge hole into which the second hinge shaft of the hinge bracket is inserted is formed in another end of the connecting rod. Novinger does not disclose the rotary link fixed to the motor shaft. The patent to Johansson shows that a direct connection between the rotary link 18,19 and the motor shaft (see column 2, lines 5-10) is an equivalent structure known in the art. Therefore, because these two drive mechanisms were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the indirect drive mechanism of Novinger for a direct drive mechanism with the rotary link connected to the motor shaft.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

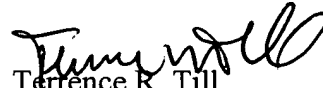
11. The patents to Witt, Lynch, Belknap and Brasty all disclose oscillatory driven brushes in vacuum cleaner nozzles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

Art Unit: 1744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Terrence R. Till
Primary Examiner
Art Unit 1744

trt